

# Fall 2009 - Global Climate Change - Challenges and Options in North Carolina and Beyond

Join us for four evenings of lectures by eminent UNC-Chapel Hill scholars who will address global climate change and its impact closer to home. The University is actively engaged in many facets of this topic and many researchers are contributing to options and solutions to the challenges we face.

Public Policy and Planning for Climate Change

When: Thursday, October 15, 7-9 pm.

Course #2624

## **Richard "Pete" Andrews, Professor of Public Policy and of Environmental Sciences and Engineering, UNC-Chapel Hill**

Climate change poses major challenges and policy choices both for America and North Carolina. One such challenge is in determining what North Carolina can do, and what makes sense for us to do, to mitigate the rapid pace of global warming. How can we reduce carbon dioxide and greenhouse gas emissions before they do even more damage than is already inevitable? Another challenge is in determining how North Carolina can best adapt to the global warming that has already occurred and to its consequences, such as sea level rise, droughts, storms, and more. How can we make wise decisions to create a sustainable and productive economy in the context of these trends? A third challenge is deciding what policy changes are needed. North Carolina has already taken some initial policy initiatives, but what further steps are needed, and how will these work as the federal government now begins to create national policies to address these issues? How will these policies affect other important aspects of North Carolinians' lives---businesses, households, local governments, and particularly people of modest income struggling with the effects of the present economic recession? How can effective climate policies be designed to serve these other needs as well?

## **Climate Change and the Carolina Coast**

When: Thursday, October 29, 7-9 pm.

Course #2625

Brent A. McKee, Mary and Watts Hill Jr. Distinguished Professor and Chair of the Department of Marine Sciences, UNC-Chapel Hill, North Carolina has one of the most vulnerable coastal zones in the United States in terms of projected climate change impacts. Projected acceleration in the rate of sea level rise and predictions of an increased intensity of Atlantic tropical storms could result in an unprecedented loss of coastal environments and ecosystems. However, our understanding of how coastal wetlands, estuaries, and river systems will respond to these climate changes is very poor, and those responses are not incorporated into current models of coastal change. We will discuss what some exciting new research tells us about what we can expect over the next century in coastal North Carolina.

## **The Energy Landscape: Options for the Future**

When: Thursday, November 5, 7-9 pm.

Course #2626

John Papanikolas, Associate Professor of Chemistry and Deputy Director of the UNC Energy Frontier Research Center  
Energy is at the heart of our economic well-being. But limited oil and gas supplies and the impacts of global warming caused by fossil fuels are leading to increasing uncertainty about our energy future. In this presentation, we will explore this important global issue. We will discuss emerging and future technologies that could increase sustainability and efficient use of existing energy supplies. We will also explore the impact of our continued dependence on fossil fuels; control of carbon emissions; an energy future based on nuclear energy, hydrogen, biomass, and solar; and how we can reach that future.

Details: <http://www.fridaycenter.unc.edu/pdep/wbi/index.htm>